SpyWolf

Project Audit

Project:

TESTPAPA

March 24, 2022

Overview

This audit has been prepared for **Catcoin Mama** to review the main aspects of the project to help investors make make an informative decision in the research process .

⚠️ **The current audit is for test contract but not the actual CatCoin contract.**

You will find a a summarized review of the following main key point::

- Contract's source code
- Project and team
- Website
- Social media & online presence

NOTE: We ONLY consider a project safe if they receive our "Certificate of Trust" NFT. This report only points out any potential red flags found in our analysis. Always do your own research before investing in a project.

Smart Contract Review

The contract review process pays special attention to the following:

- Testing the smart contracts against both common and uncommon vulnerabilities

- Assessing the codebase to ensure compliance with current best practices and industry standards.

- Ensuring contract logic meets the specifications and intentions of the client.

- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.

- Thorough line-by-line manual review of the entire codebase by industry experts.

"The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal"
- SpyWolf Team

Smart Contract Summary

Contract Name	TESTPAPA
Ticker	TESTPAPA
Contract	0xAFAC39E2ae194d92cd089542152Dada5Bd3Ea436
Network	Binance smart chain
Language	Solidity
Tax	**Buy: 7%** **Sell: 7%**
Total Supply	1,000,000,000,000,000
Status	Not launched yet

Current stats

Burn	No tokens burned
LP Address	Liquidity not added yet
Liquidity	Liquidity not added yet
MaxTxAmount	No Limit

Smart Contract Statistics

Transfer Count	10
Uniq Senders	7
Uniq Receivers	5
Total Amount	2019362818144311 TESTPAPA
Median Transfer Amount	5995382349230 TESTPAPA
Average Transfer Amount	201936281814431 TESTPAPA
First transfer date	2022-03-22
Last transfer date	2022-03-23
Days tokens Transfer	2

Issues Checking Status

Design Logic	**Passed ✓**
Compiler warnings.	**Passed ✓**
Private user data leaks	**Passed ✓**
Timestamp dependence	**Passed ✓**
Integer Overflow and Underflow	**Passed ✓**
Race conditions and Reentrancy. Cross-function race conditions	**Passed ✓**
Possible delays in data delivery	**Passed ✓**
Oracle calls	**Passed ✓**
Front running	**Passed ✓**
DoS with Revert	**Passed ✓**
DoS with block gas limit	**Passed ✓**
Methods execution permissions	**Passed ✓**
Economy model	**Passed ✓**
The impact of the exchange rate on the logic	**Passed ✓**
Malicious Event log	**Passed ✓**
Scoping and Declarations	**Passed ✓**
Uninitialized storage pointers	**Passed ✓**
Arithmetic accuracy	**Passed ✓**
Cross-function race conditions	**Passed ✓**
Safe Zeppelin module	**Passed ✓**
Fallback function security	**Passed ✓**

Featured Wallets

Owner address	0x93eD8e6253290A7F4898bA12a9BFb096a13751e2
Development wallet	0x08A5589a92Ca3c36ad78a6bEA96D8ee92f455DFE
Donation wallet	0x90683e99e14127797b09154145Bd00c2787Cecdc
Marketing wallet	0x5e9f8c4649F956D0317063CD5e94017c5aaCA2D6
LP token address	No liquidity added yet

Top 3 Unlocked Wallets

Wallet 1 (99.94%)	Same as owner
Wallet 2 (0.06%)	0x91df703544eb4004eb50e578096ca1507b3d355d

Tokens are not distributed yet

Security Threats

⚠️ **Owner can lock account from selling entire amount of purchased tokens from presale investor for certain period of time. Included accounts can sell in the following schedule:**
- **25% of total purchased presale tokens within 1 week**
- **50% of total purchased presale tokens within 2 weeks**
- **75% of total purchased presale tokens within 3 weeks**
- **100% of total purchased presale tokens after 4 weeks**

```solidity
function vestAccount(address account, bool enable) public onlyOwner {
    require(!isPresaleComplete, 'Cannot vest after token presale!');
    if (enable) {
        VestInfo memory vestInfo = VestInfo(
        {vestAmount : balanceOf(account), enabled : true});
        _vests[account] = vestInfo;
    } else {
        _vests[account].enabled = false;
    }
}
```

```solidity
function spendVestedTokens(address account, uint256 senderBalance, uint256 amount) internal view {
    if (!_vests[account].enabled || !isPresaleComplete) {
        return;
    }
    VestInfo memory vestInfo = _vests[account];
    uint256 balanceLocked = 0;
    uint256 elapsedTime = block.timestamp - presaleCompletedTimestamp;
    if (elapsedTime >= 4 weeks) {
        balanceLocked = 0;
    } else if (elapsedTime >= 3 weeks) {
        balanceLocked = vestInfo.vestAmount.mul(25).div(100);
    } else if (elapsedTime >= 2 weeks) {
        balanceLocked = vestInfo.vestAmount.mul(50).div(100);
    } else {
        balanceLocked = vestInfo.vestAmount.mul(75).div(100);
    }
    require(senderBalance - amount >= balanceLocked, 'Maximum spend amount exceeded during vesting cycle');
}
```

Security Threats

⚠️ **Owner can change burn and liquidity tax up to 100%**

```solidity
function switchAutoBurn(uint16 taxBurn_, bool enable) public onlyOwner {
    if (!enable) {
        require(_autoBurnEnabled, "Already disabled.");
        setTaxBurn(0);
        _autoBurnEnabled = false;
        emit DisabledAutoBurn();
        return;
    }
    require(!_autoBurnEnabled, "Already enabled.");
    require(taxBurn_ > 0, "Tax must be greater than 0.");
    _autoBurnEnabled = true;
    setTaxBurn(taxBurn_);
    emit EnabledAutoBurn();
}
function switchAutoSwapAndLiquify(uint16 taxLiquify_, uint256 minTokensBeforeSwap_,
 bool enable) public onlyOwner {
    if (!enable) {
        require(_autoSwapAndLiquifyEnabled, "Already disabled.");
        setTaxLiquidity(0);
        _autoSwapAndLiquifyEnabled = false;
        emit DisabledAutoSwapAndLiquify();
        return;
    }
    require(!_autoSwapAndLiquifyEnabled, "Already enabled.");
    require(taxLiquify_ > 0, "Tax must be greater than 0.");
    _minTokensBeforeSwap = minTokensBeforeSwap_;
    _autoSwapAndLiquifyEnabled = true;
    setTaxLiquidity(taxLiquify_);
    emit EnabledAutoSwapAndLiquify();
}
```

Security Threats

Owner can change taxes up to 9% (combined buy+sell=18%), but can change liquidity and burn taxes individually up to 100% (see the previous slide).

```solidity
function setTaxBurn(uint16 taxBurn_) public onlyOwner {
    require(_autoBurnEnabled, "Auto burn not enabled");
    uint16 previousTax = taxBurn();
    _taxBurn = taxBurn_;
    ensureTotalFeeBounds();
    emit TaxBurnUpdate(previousTax, taxBurn_);
}
function setTaxDividend(uint16 taxDividend_) public onlyOwner {
    require(taxDividend_ >= 200, 'Must be above 2%');
    uint16 previousTax = taxDividend();
    _taxDividend = taxDividend_;
    ensureTotalFeeBounds();
    emit TaxDividendUpdate(previousTax, taxDividend_);
}
```

```solidity
function setTaxMarketing(uint16 taxMarketing_) public onlyOwner {
    require(taxMarketing_ >= 100, 'Must be above 1%');
    uint16 previousTax = taxMarketing();
    _taxMarketing = taxMarketing_;
    ensureTotalFeeBounds();
    emit TaxMarketingUpdate(previousTax, taxMarketing_);
}
function setTaxDonation(uint16 taxDonation_) public onlyOwner {
    require(taxDonation_ >= 100, 'Must be above 1%');
    uint16 previousTax = taxDonation();
    _taxDonation = taxDonation_;
    ensureTotalFeeBounds();
    emit TaxDonationUpdate(previousTax, taxDonation_);
}
```

```solidity
function setTaxDevelopment(uint16 taxDevelopment_) public onlyOwner {
    uint16 previousTax = taxDevelopment();
    _taxDevelopment = taxDevelopment_;
    ensureTotalFeeBounds();
    emit TaxDevelopmentUpdate(previousTax, taxDevelopment_);
}
function setTaxLiquidity(uint16 taxLiquify_) public onlyOwner {
    require(_autoSwapAndLiquifyEnabled, "Auto swap and liquify not enabled");
    uint16 previousTax = taxLiquidity();
    _taxLiquidity = taxLiquify_;
    ensureTotalFeeBounds();
    emit TaxLiquifyUpdate(previousTax, taxLiquify_);
}
```

```solidity
function ensureTotalFeeBounds() internal view {
    uint16 totalTax = taxBurn() +
    taxMarketing() +
    taxDonation() +
    taxDevelopment() +
    taxDividend() +
    taxLiquidity();
    require(totalTax <= 900, 'Total tax must be below 9%');
}
function _calculateTax(uint256 amount, uint16 tax) private pure returns (uint256) {
    return amount * tax / (10 ** 2) / (10 ** 2);
}
```

Tokenomics

Current state

Tokens are not distributed yet.

Catcoin Mama
Project & Team Review

⚠️ Currently there is no information about what this project is about in their website and socials.
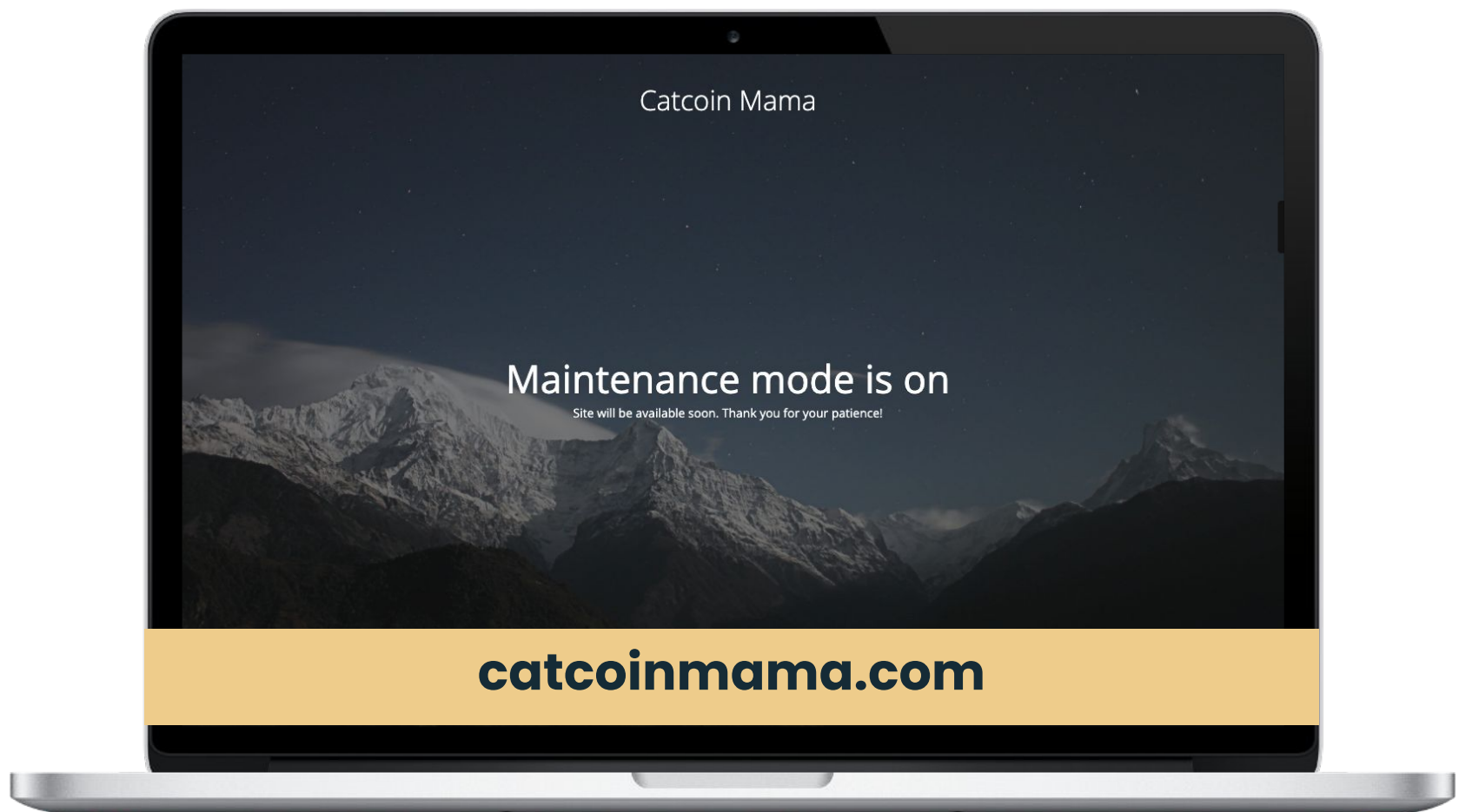
Team:

⚠️ Currently there is no information about the team

Website Analysis

URL: https://catcoinmama.com/

- **Design:** Website is currently under construction. ⚠️

- **Content:** Website is currently under construction, no content yet. ⚠️

- **Whitepaper:** Website is under construction, no whitepaper yet. ⚠️

- **Roadmap:** Website is under construction, no roadmap yet. ⚠️

- **Mobile-friendly?** Yes

- **Technical:** SSL certificate present. General SEO check passed.
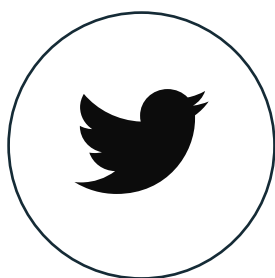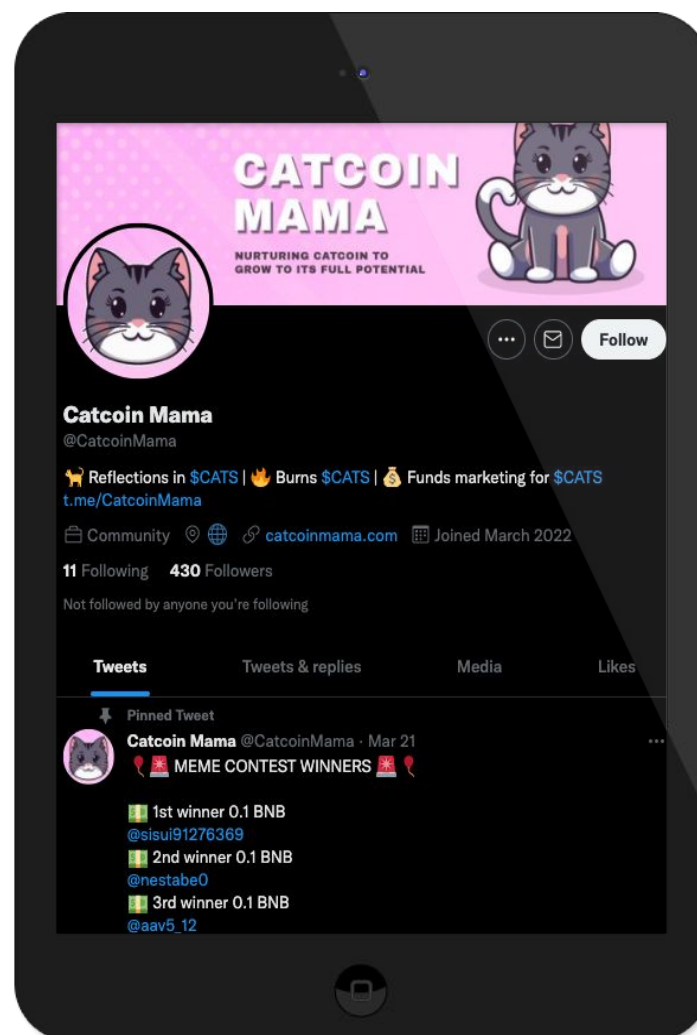

Catcoin Mama

Maintenance mode is on

Site will be available soon. Thank you for your patience!

catcoinmama.com

Social Media & Online Presence

Telegram

https://t.me/CatcoinMama

- 188 members
- Few active members
- Slow response from mods

Twitter

https://twitter.com/CatcoinMama


- 430 Followers
- Active

About SpyWolf

SpyWolf is a team of crypto security experts that have been performing full audits for projects for the past months in order to ensure safety on the crypto space. Our goal is to help eliminate monetary fraud through our auditing services and utility token, $SPY.

▶ Website: SpyWolf.co

▶ Portal: SpyWolf.network

▶ Telegram: @SpyWolfNework

▶ Twitter: Twitter.com/SpyWolfNetwork
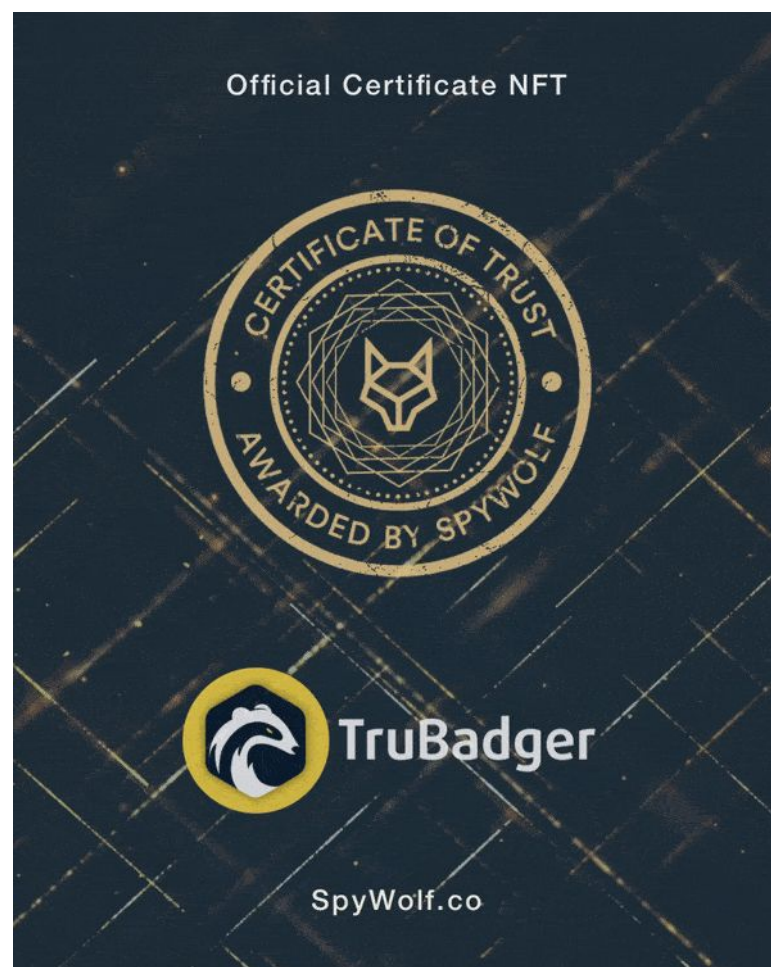
(Sample Certificate NFT for those who pass audit)

If you are interested in finding out more about our audits and Certificate of Trust NFTs, reach out to contact@spywolf.co.

Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.